

Work Order ID 54020

November 26, 2009 7:38:09 AM

Page 1

Item ID: D044-715-011

Revision ID: A

Item Name: R44 Cargo Mirror

Start Date: 11/26/09 Start Qty: 4.00

Required Date: 11/27/09 Req'd Qty: 4.00

Reference:

Approvals: Process Plan:

QC:

Date:

Date:

Tooling:

SPC (Y/N):

Date:

Date:

Run Start

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3243

Rev A

IIN-D044-715

Rev A

100

0.00



DC

Document Control

DOCUMENT CONTROL

Memo

0.00

Photocopy bluefile & type labels per PPPD044-715-011

CHG002

CHG7003

PER ECN 08-548

110

0.00



Waterjet

FLOW CNC Waterjet

FLOW WATER JET

Memo

0.00

1-Cut as per Dwg D3243

Dwg Rev:

Prog Rev:

*MA pull from stock
D3243-044*

Work Order ID 54020

November 26, 2009 7:38:10 AM



Page 2

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Required Date: 11/27/09 Req'd Qty: 4.00

Reference:

Accept



Setup Start



Stop



Cust Item ID:

Customer:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

0.00

Quality Control

130

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

140

NC BRAKE

0.00



Brake NC

Memo

0.00

Brake NC

Bend as per Dwg D3243

W/A u

Work Order ID 54020

November 26, 2009 7:38:10 AM



Page 3

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Start Date: 11/26/09 Start Qty: 4.00

Required Date: 11/27/09 Req'd Qty: 4.00

Reference:

Accept



Setup Start



Stop



Cust Item ID:

Customer:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

150



QC

Quality Control

QC6- Inspect dimensions to drawing

0.00

Memo

0.00

160



HandFinish

Hand Finishing

Chemical Conversion Coat per QSI005 4.1

0.00

Memo

0.00

170



QC

Quality Control

QC3- Inspect Part Finish

0.00

Memo

0.00

N/A

Work Order ID 54020

November 26, 2009 7:38:10 AM



Page 4

Item ID: D044-715-011

Accept



Setup Start



Revision ID: A

Stop



Item Name: R44 Cargo Mirror

Start Date: 11/26/09 Start Qty: 4.00



Cust Item ID:

Required Date: 11/27/09 Req'd Qty: 4.00



Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

180



Small Fab

Small Fab

0.00

Memo

0.00

Small Fab

Assemble as per Dwg d3243

190



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

NA

200



Powdercoat

Powder Coating

Black Sandtex(Ref:4.3.5.7) per QSI005 4.3

0.00

Memo

0.00

plug holes with screws before powdercoat

START TIME: _____

OVEN TEMPERATURE: _____

FINISH TIME: _____

Work Order ID 54020

November 26, 2009 7:38:18 AM

Page 5

Item ID: D044-715-011
Revision ID: A
Item Name: R44 Cargo Mirror

Accept

Setup Start

Stop

Start Date: 11/26/09 Start Qty: 4.00
Required Date: 11/27/09 Req'd Qty: 4.00

Cust Item ID:
Customer:

Reference:

Approvals: Process Plan: Date:
QC: Date:

Tooling: Date:
SPC (Y/N): Date:

Run Start
Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

210
QC
Quality Control

QC3- Inspect Part Finish

0.00

0.00

Memo

220
Packaging
Packaging

Pick Kit

0.00

0.00

Memo

230
QC
Quality Control

QC4- 100% Inspect kits for completeness

0.00

0.00

Memo

⇒ 80912116

9/12/15 SCL

① 40 p

Work Order ID 54020

November 26, 2009 7:38:19 AM

Page 6

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Item Name: R44 Cargo Mirror

Start Date: 11/26/09 Start Qty: 4.00

Required Date: 11/27/09 Req'd Qty: 4.00

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

240

0.00



Packaging

Packaging

Memo

0.00

Identify and pack for shipping as per PPP D044-715-011

Location: 42

REV D

9/10/16

(4x) \$

250

0.00



QC

Quality Control

QC21- Final Inspection - Work Order Release

Memo

0.00

09/12/17

MF
09-12-18

Picklist Print

November 26, 2009 7:38:07 AM

Page 1
4

Work Order ID: 54020

Parent Item: D044-715-011RevA

Parent Item Name: R44 Cargo Mirror

Comments: IPP Rev:C 08-06-10 as per ECN1195p DD verified by:EC

Start Date: 11/26/09

Required Date: 11/27/09

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
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M6061-T6S.063

Purchased

No

110

sf

210.0499

2.1491



6061-T6 .063 Sheet

MA

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

MAT

210.0499211

110551

31.0341211

112939

179.0158

FE-032-EF

Purchased

No

180

Each

121.0000

16.0000



Inserts

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

121

108546

21

110836

100

D1048RevA

Manufactured

No

230

Each

13.0000

8.0000



Saddle

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

13

45382

13

9/12/15 sl (42)

B 23461

8 ① 1
B38776 B29416 sl

14 D3243-041
SA

Picklist Print

November 26, 2009 7:38:07 AM

Page 2

Work Order ID: 54020

Parent Item: D044-715-011RevA

Parent Item Name: R44 Cargo Mirror

Comments: IPP Rev:C 08-06-10 as per ECN1195p DD verified by:EC

Start Date: 11/26/09

Required Date: 11/27/09

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

D1049RevA		Manufactured	No			230	Each	21.0000	8.0000			
-----------	--	--------------	----	--	--	-----	------	---------	--------	--	--	--



Saddle

9/12/15

Warehouse	Loc Qty	Loc Code
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Location

Main Warehouse

ST

21

45810

1

53485

20

D2010-104RevD		Manufactured	No			230	Each	12.0000	4.0000			
---------------	--	--------------	----	--	--	-----	------	---------	--------	--	--	--



Mirror Arm 369/500

9/12/15

Warehouse	Loc Qty	Loc Code
-----------	---------	----------

Location

Main Warehouse

ST

12

24969

0

40046

12

D2011-101RevG		Manufactured	No			230	Each	9.0000	4.0000			
---------------	--	--------------	----	--	--	-----	------	--------	--------	--	--	--



6" Mirror

9/12/15 sel 42

Warehouse	Loc Qty	Loc Code
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Location

Main Warehouse

ST

9

22179

0

51351

9

November 26, 2009 7:38:07 AM

Shop Packet Print

Page 2

Picklist Print

November 26, 2009 7:38:07 AM

Page 3

Work Order ID: 54020

Parent Item: D044-715-011RevA

Parent Item Name: R44 Cargo Mirror

Comments: IPP Rev:C 08-06-10 as per ECN1195p DD verified by:EC

Start Date: 11/26/09

Required Date: 11/27/09

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN3-4A- Bolt		Purchased	No			230	Each	2,113.000	16.0000	(3)		

M103641 9/18/15 SP

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST	2113
103915	54
104214	500
104291	300
104322	200
104374	200
104625	300
104817	559

13x

AN526C1032R10 Purchased

No

230

Each

530.0000

16.0000

9/12/15 (40) SP

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST	530
108062	127
108167	35
110049	368

16

November 26, 2009 7:38:07 AM

Shop Packet Print

Page 3

Picklist Print

November 26, 2009 7:38:08 AM

Page 4

Work Order ID: 54020

Parent Item: D044-715-011RevA

Parent Item Name: R44 Cargo Mirror

Comments: IPP Rev:C 08-06-10 as per ECN1195p DD verified by:EC

Start Date: 11/26/09

Required Date: 11/27/09

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
ALS4-1032-130	R44	Purchased	No			230	Each	3,265.000	16.0000			



Insert

9/18/15 sp

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST
110511

3265

3265

230

Each

5,529.000

16.0000

16

9/12/15 sp

AN960JD10L



Washer

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

5529

101291

16

104885

153

105793

236

109632

316

110985

4808

16

November 26, 2009 7:38:08 AM

Shop Packet Print

Page 4

2. GENERAL NOTES

COMPATIBILITY

Compatibility of this installation with the aircraft is the **responsibility of the installer**. Ensure that this installation does not conflict with a previous modification.

CONTINUING AIRWORTHINESS

This installation should be maintained in accordance with the Instructions for Continued Airworthiness ICA-D044-715.

3. INSTALLATION INSTRUCTIONS

To install the Dart Cargo Mirror Installation on the R44 skidtube:

1. Locate the D3243-041 Bracket with approximately 0.38" (10mm) space between the top of the skidtube and the bracket, as shown in Figure 2. Transfer drill the 4 holes from the bracket to the centerline of skidtube and enlarge to 10/64" (Ø0.297"). Deburr holes and wet install ALS7-1032-130 inserts using MIL-P-85582 or MIL-P-23377 primer.
2. Install the D3243-041 Bracket on the skidtube using the AN3 hardware. The bolts should be sealed with Sikaflex-241/-291 or Proseal 890 or MIL-S-8802 Class 'B2' sealant before installing as per Figure 2.
3. Install remaining hardware per Figure 2 as required. Adjust the angle of the D2010-104 Arm and tighten the AN526C1032R10 screws to secure arm.
4. To adjust the mirror: loosen (DO NOT REMOVE) the three adjustment screws shown in Figure 2, reposition the mirror, then tighten the screws.

4. WEIGHT AND BALANCE

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D044-715-011 Cargo Mirror Installation	1.3 lb 0.59 kg	41.7 in 1.06 m	54.2 lb-kG 0.63 m-kG	32.0 in 0.81 m	41.6 in-lb 0.48 m-kG

5. PARTS LIST

Qty	Part Number	Description
X	D044-715-011	CARGO MIRROR INSTALLATION
2	D1048	Clamp
2	D1049	Saddle
1	D2010-104	Arm
1	D2011-101	Mirror
1	*D3014-1	Locknut
1	D3243-041	Bracket
4	ALS7-1032-130	Insert (or AKS7-1032-130, AKS4-1032-130, ALS4-1032-130)
4	AN3-4A	Bolt
4	AN526C1032R10	Screw (or AN526-1032R10)
4	AN960JD10L	Washers
1	*AN960JD416L	Washer

* PARTS ARE INCLUDED WITH D2011-101 MIRROR

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Revision: A
Date: 04.01.20

REFERENCE ONLY

32.2 CARGO MIRROR REMOVAL

- 32.2.1 Remove the AN3 bolts securing the D3243-041 Bracket to the skidtube and remove the Cargo Mirror.
- 32.2.2 Reinstall the AN3-4A bolts in the inserts. The bolts should be sealed with Sikaflex-241/-291 or Proseal 890 or MIL-S-8802 Class 'B2' sealant before installing.

32.3 WEIGHT AND BALANCE

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D044-715-011 Cargo Mirror Installation	1.3 lb 0.59 kg	41.7 in 1.06 m	54.2 lb-kg 0.63 m-kg	32.0 in 0.81 m	41.6 in-lb 0.48 m-kg

32.4 PARTS LIST

Qty	Part Number	Description
X	D044-715-011	CARGO MIRROR INSTALLATION
2	D1048	Clamp
2	D1049	Saddle
1	D2010-104	Arm
1	D2011-101	Mirror
1	*D3014-1	Locknut
1	D3243-041	Bracket
4	ALS7-1032-130	Insert (or AKS7-1032-130, AKS4-1032-130, ALS4-1032-130)
4	AN3-4A	Bolt
4	AN526C1032R10	Screw (or AN526-1032R10)
4	AN960JD10L	Washers
1	*AN960JD416L	Washer

* PARTS ARE INCLUDED WITH D2011-101 MIRROR

TC Accepted

MAR 31 2004